



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,403	07/02/2001	Kenneth William Hunt	004565-067	9206

30159 7590 03/22/2007
LEGAL DEPARTMENT INTELLECTUAL PROPERTY
KINETIC CONCEPTS, INC.
P.O. BOX 659508
SAN ANTONIO, TX 78265-9508

EXAMINER

HAND, MELANIE JO

ART UNIT PAPER NUMBER

3761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/807,403

Applicant(s)

HUNT ET AL.

Examiner

Melanie J. Hand

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Briefly, with respect to applicant's arguments regarding the prior art of Hunt: Applicant argues first, with respect to claim 1, that Examiner is arguing that the filter 109 is a shut-off valve. This is incorrect. Examiner is stating that the filter, if it acts as anything other than a filter, acts as a sensor in that when the liquid level occludes the filter, a negative pressure is created that is sensed by transducer 105. Examiner states clearly that canister 100 has spigots 7A,B and a filter. Spigots are merely shut-off valves that control the release of a liquid or gas.

Second, applicant argues with respect to independent claims 1 and 14 that substituting a wall suction unit for the pump taught by Hunt will render the apparatus inoperable for its intended purpose of providing treatment to mobile patients. Examiner agrees, however portable is not the only mode that the apparatus of Hunt can be used in. the device does not become inoperable as a whole once it is no longer mobile. The device is equally capable of functioning as a traditional wound treatment device and thus a wall suctioning device, in order to validate applicant's argument, would have to render the device completely inoperable in order for the applicant to argue to successfully overcome the rejection of claim 1.

Applicant argues with respect to claim 2 that neither Hunt nor Dixon teaches or suggests a flow-limiting valve. Applicant's basis for this argument is unclear and Applicant even states that "As the Office Action notes, check valve 26 merely enables evacuation of container 10. Check valve 26 also prevents fluid from flowing back into container 10." Each of these scenarios is a flow-limiting scenario in that the valve either enables flow of gas or liquid out of the container (evacuation) or prevents backflow into the container. This statement also verifies the

Art Unit: 3761

very definition of a check valve, which is merely a one-way valve that is obviously capable of limiting the flow of liquid or gas if it can stop said flow completely.

Applicant then appears to argue impermissible hindsight on the part of the Examiner, but again this is unclear from applicant's remarks and it is further unclear what hindsight, if any, applicant believes has occurred. Examiner attempts herein to answer the argument to the fullest extent possible. The statement of motivation to combine the device of Dixon with the device of Hunt derives from the fact that the devices are analogous art with respect to each other in that both seek to solve a similar problem in the art (i.e. evacuating a fluid collection container. Since both devices comprise containers having spigots (or shut-off valves), and the check valve incorporated into the shut-off valve taught by Dixon provides an identical function to the shut off valves of both Dixon and Hunt while providing the added benefit of being a one way valve and thus preventing backflow, the motivation is clear to combine these devices. Nevertheless, Examiner has restated the rejection to include this further explanation in the interest of clarification.

Applicant argues with respect to claim 8 that a possible oversight led to the discussion of flow meters in the rejection of claim 8. Examiner had combined the rejections of claims 5-8 which is what the discussion can be attributed to. Examiner has separated these rejections for clarity.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al (GB 2,307,180 A).

With respect to **Claim 1**: Hunt teaches a portable suction apparatus comprising housing 210, canister 100, suction pump 6 and wound dressing 102 comprised of an open cell polyurethane foam. Wound dressing 102 is connected to canister 100 via tube 103. Canister 100 has spigots 7A, 7B and a filter 109 at its outlet end wherein when the liquid level occludes said filter, a greatly increased negative pressure occurs that is sensed by a transducer 105 which shuts off the working of the pump 6.

Hunt does not explicitly teach a wall suction source, however such an item performs a substantially identical function to the portable suction pump taught by Hunt and thus it would be obvious to one of ordinary skill in the art to substitute a vacuum bottle for the suction pump taught by Hunt with a reasonable expectation of success to ensure the same level of function while the device is stationary as when the device is used portably with a portable suction pump.

With respect to **Claim 3**: Hunt teaches pressure relief valve 8 connected to tube 103 that connects dressing 102 and canister 100.

With respect to **Claim 4,15**: Hunt teaches transducers 105 and 108. Transducer 105 measures the negative pressure in tube 103 between suction pump 6 and canister 100, and transducer 108 measures the pressure at the wound site wherein dressing 102 is connected by tube 106 to canister 100. Both transducers and pressure relief valve 8 are operatively connected to a microprocessor 4 and a membrane assembly 3 comprising an LCD indicator and control buttons, thus collectively providing a pressure regulating means between canister 100 and

Art Unit: 3761

suction pump 6. Hunt teaches that microprocessor 4 is capable of being programmed to deliver intermittent suction to a wound site.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt ('180) in view of Dixon ('703).

With respect to **Claim 2**: Hunt does not teach a flow-limiting valve between canister 100 and suction pump 6. Dixon teaches a wound drainage system comprising a container 10 having spigot 25 for connection to a hospital vacuum source said spigot having incorporated check valve 26. ('703, Col. 3, lines 15-19) The devices of Hunt and Dixon seek to solve a similar problem in the art (i.e. evacuating a fluid collection container). Since both devices comprise containers having spigots (or shut-off valves), and the check valve incorporated into the spigot/shut-off valve taught by Dixon provides an identical function to the shut off valves of both Dixon and Hunt while providing the added benefit of being a one-way valve and thus preventing backflow, it would be obvious to modify the apparatus taught by Hunt so as to have a check valve disposed between canister 100 and suction pump 6 as taught by Dixon to enable said canister to be emptied and ready for further use. ('703, Col. 3, lines 19,20).

Claims 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt ('180) in view of Wurster (U.S. Patent No. 4,051,431).

With respect to **Claims 5-7**: Hunt does not teach a flow meter to measure the rate at which fluid is sucked from a wound site. Wurster teaches an apparatus for measuring volume of urine flow electrically, i.e. a sensor operable to detect when a canister is full. Wurster teaches that using

Art Unit: 3761

electrical capacitance measurements to determine urine flow rates (and thus the flow rate of any electrically conductive fluid) is known in the art ('431, Col. 1, lines 16-24, 43-54), therefore it would be obvious to modify the device of Hunt so as to employ flow meters that provide output in terms of electrical capacitance that is later converted into flow measurement as taught by Wurster to sense when the canister taught by Hunt is full.

With respect to **claim 8**: Hunt teaches a portable suction apparatus comprising housing 210, canister 100, suction pump 6 and wound dressing 102 comprised of an open cell polyurethane foam. Wound dressing 102 is connected to canister 100 via tube 103. Canister 100 has spigots 7A, 7B and a filter 109 at its outlet end wherein when the liquid level occludes said filter, a greatly increased negative pressure occurs that is sensed by a transducer 105 which shuts off the working of the pump 6.

Hunt does not explicitly teach a wall suction source, however such an item performs a substantially identical function to the portable suction pump taught by Hunt and thus it would be obvious to one of ordinary skill in the art to substitute a vacuum bottle for the suction pump taught by Hunt with a reasonable expectation of success to ensure the same level of function while the device is stationary as when the device is used portably with a portable suction pump.

Hunt does not teach a sensor operable to detect when said canister is full. Wurster teaches an apparatus for measuring volume of urine flow electrically, i.e. a sensor operable to detect when a canister is full. Wurster teaches that using electrical capacitance measurements to determine urine flow rates (and thus the flow rate of any electrically conductive fluid) is known in the art ('431, Col. 1, lines 16-24, 43-54), therefore it would be obvious to modify the device of Hunt so as to employ flow meters that provide output in terms of electrical capacitance that is

Art Unit: 3761

later converted into flow measurement as taught by Wurster to sense when the canister taught by Hunt is full.

With respect to **Claim 9**: Canister 100 has spigots 7A, 7B and a filter 109 at its outlet end wherein when the liquid level occludes said filter, a greatly increased negative pressure occurs that is sensed by a transducer 105 which shuts off the working of the pump 6. Hunt does not teach a wall suction point, however as established previously, it would be obvious to substitute a wall suction source for the pump taught by Hunt, thus the transducer 105 would also be operable as a means for shutting off the connection to the wall suction source.

With respect to **Claim 10**: Hunt teaches transducer 108 as a means for monitoring the pressure at the wound site.

With respect to **claim 11**: Hunt teaches transducer 105 that is the means for monitoring the negative pressure in tube 103 between suction pump 6 (or a wall suction source) and canister 100.

Hunt does not explicitly teach a wall suction source, however such an item performs a substantially identical function to the portable suction pump taught by Hunt and thus it would be obvious to one of ordinary skill in the art to substitute a vacuum bottle for the suction pump taught by Hunt with a reasonable expectation of success to ensure the same level of function while the device is stationary as when the device is used portably with a portable suction pump.

With respect to **claim 12**: Transducer 105 functions as a pressure detector that detects negative pressure that is created when the liquid level in the canister 100 occludes filter 109. Transducer

Art Unit: 3761

105 is connected by a branch tube 103 to the suction tube 106 leading from pad 102 to canister 100.

With respect to **claim 13**: Processor 4 is operationally coupled to pressure relief valve 8 and is capable of being programmed to deliver intermittent suction therapy to a wound site.

With respect to **Claim 14**: Hunt teaches a portable suction apparatus comprising housing 210, canister 100, suction pump 6 and wound dressing 102 comprised of an open cell polyurethane foam. Wound dressing 102 is connected to canister 100 via tube 103. Canister 100 has spigots 7A, 7B and a filter 109 at its outlet end wherein when the liquid level occludes said filter, a greatly increased negative pressure occurs that is sensed by a transducer 105 which shuts off the working of the pump 6. Hunt teaches transducers 105 and 108. Transducer 105 measures the negative pressure in tube 103 between suction pump 6 and canister 100, and transducer 108 measures the pressure at the wound site wherein dressing 102 is connected by tube 106 to canister 100. Both transducers and pressure relief valve 8 are in electronic communication with a microprocessor 4 and a membrane assembly 3 comprising an LCD indicator and control buttons, thus collectively providing a pressure regulating means between canister 100 and suction pump 6. Hunt teaches that microprocessor 4 is capable of being programmed to deliver intermittent suction to a wound site.

Hunt does not explicitly teach a wall suction source, however such an item performs a substantially identical function to the portable suction pump taught by Hunt and thus it would be obvious to one of ordinary skill in the art to substitute a vacuum bottle for the suction pump taught by Hunt with a reasonable expectation of success to ensure the same level of function as when the device is used portably with a portable suction pump.

Art Unit: 3761

With respect to **Claim 15**: Both transducers and pressure relief valve 8 are in electronic communication with a microprocessor 4 and a membrane assembly 3 comprising an LCD indicator and control buttons, thus collectively providing a pressure regulating means between canister 100 and suction pump 6.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

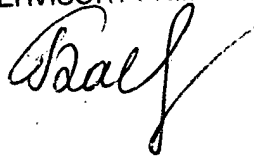
Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand
Examiner
Art Unit 3761

March 12, 2007

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Tatyana', is written over the printed name and title.